

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
21 March 2002 (21.03.2002)

PCT

(10) International Publication Number
WO 02/023510 A3

(51) International Patent Classification⁷: **G02B 3/00**

[IL/IL]; 27 Hohit Street, Givat-Haslayim, 40800 Rosh Ha'Ayin (IL).

(21) International Application Number: **PCT/IL01/00857**

(22) International Filing Date:
10 September 2001 (10.09.2001)

(74) Agents: **LUZZATTO, Kfir et al.**; Luzzatto & Luzzatto, P.O. Box 5352, 84152 Beer-Sheva (IL).

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
138461 14 September 2000 (14.09.2000) IL

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

(71) Applicant (*for all designated States except US*): **M.V.T. MULTI VISION TECHNOLOGIES LTD.** [IL/IL]; 19 Ha'Melacha Street, New Industrial Zone, P.O. Box 283, 48091 Rosh Ha'Ayin (IL).

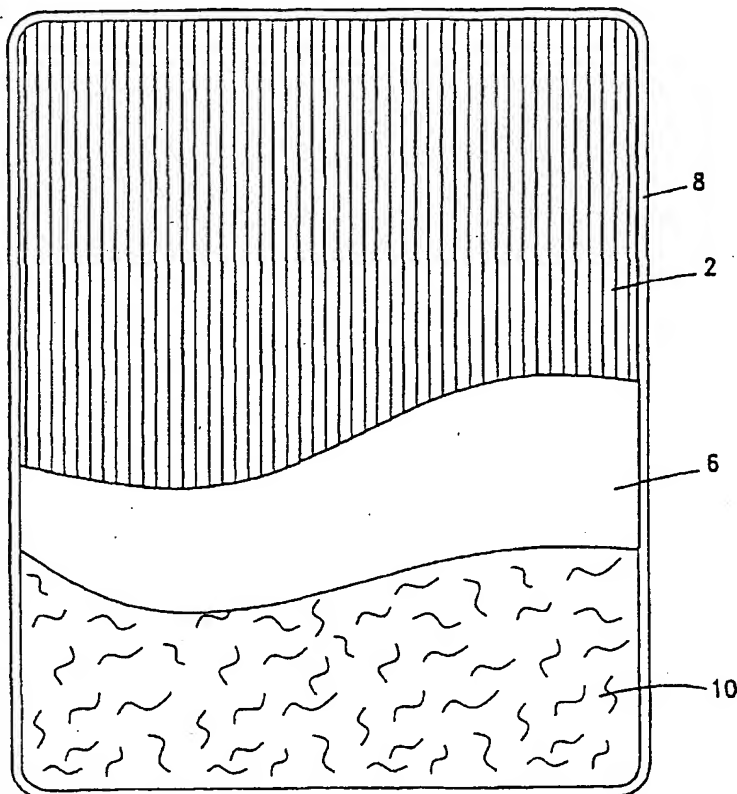
(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF,

(72) Inventor; and

(75) Inventor/Applicant (*for US only*): **BAR-YONA, Itzhak**

[Continued on next page]

(54) Title: **MEANS FOR MAINTAINING SPATIAL RELATIONSHIPS IN LENTICULAR DISPLAY UNITS**



(57) Abstract: The present invention provides an improved lenticular display unit for advertising, information, or decoration. The unit comprises means for maintaining the required spatial relationship between the indicia carrier, on which the information to be displayed is contained, and the lenticular panel containing the lenses used to display the information. In some embodiments, the unit employs spring means for maintaining the required spatial relationship, which is maintaining the required distance between the indicia carrier on which the information to be displayed is contained, and the lenticular panel containing the lenses used to display the information.

WO 02/023510 A3

WO 02/023510 A3



CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD,
TG).

(88) Date of publication of the international search report:
27 February 2003

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

 Internat
 Application No
 PCT/IL 01/00857
A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 G02B3/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 G09F G02B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	PATENT ABSTRACTS OF JAPAN vol. 015, no. 312 (P-1236), 9 August 1991 (1991-08-09) & JP 03 111887 A (TOPPAN PRINTING CO LTD), 13 May 1991 (1991-05-13) abstract	1-22
X	PATENT ABSTRACTS OF JAPAN vol. 1997, no. 04, 30 April 1997 (1997-04-30) & JP 08 320659 A (TOPPAN PRINTING CO LTD), 3 December 1996 (1996-12-03) abstract	1-22
X	US 5 647 151 A (FANTONE STEPHEN D ET AL) 15 July 1997 (1997-07-15) column 7, line 56 -column 8, line 10; figure 10	1-22
-/-		

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- *G* document member of the same patent family

Date of the actual completion of the international search

28 November 2002

Date of mailing of the international search report

05/12/2002

Name and mailing address of the ISA

 European Patent Office, P.B. 5818 Patentlaan 2
 NL - 2280 HV Rijswijk
 Tel (+31-70) 340-2040, Tx. 31 651 epo nl,
 Fax: (+31-70) 340-3016

Authorized officer

Sarneel, A

INTERNATIONAL SEARCH REPORT

Internat. Application No.
PCT/IL 01/00857

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,A	US 6 226 906 B1 (BAR-YONA ITZCHAK) 8 May 2001 (2001-05-08) column 2, line 64 -column 4, line 44; figures 1-11 ---	1-22
A	EP 1 001 401 A (M V T MULTI VISION TECHNOLOGIE) 17 May 2000 (2000-05-17) column 3, line 34 -column 5, line 22; figures 1-7 -----	1-22

INTERNATIONAL SEARCH REPORT

 Internatl Application No
 PCT/IL 01/00857

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
JP 03111887	A	13-05-1991	JP	2889612 B2	10-05-1999
JP 08320659	A	03-12-1996	JP	3031611 B2	10-04-2000
US 5647151	A	15-07-1997	US	5588526 A	31-12-1996
			AU	4466796 A	24-07-1996
			CA	2209074 A1	11-07-1996
			WO	9621172 A1	11-07-1996
			US	5782347 A	21-07-1998
			US	5941382 A	24-08-1999
			AU	2231895 A	23-10-1995
			AU	9716998 A	25-02-1999
			CN	1147234 A	09-04-1997
			EP	0750574 A1	02-01-1997
			JP	9511203 T	11-11-1997
			WO	9526916 A1	12-10-1995
			US	6010292 A	04-01-2000
			US	5850913 A	22-12-1998
			US	5769227 A	23-06-1998
			US	5833068 A	10-11-1998
US 6226906	B1	08-05-2001	IL	121005 A	17-02-2000
			US	6219948 B1	24-04-2001
EP 1001401	A	17-05-2000	EP	1001401 A1	17-05-2000
			DE	1001401 T1	04-04-2002
			ES	2165344 T1	16-03-2002